EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	506	(546/123).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/09 13:28
L2	26	I1 and phosphodiesterase	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2007/08/09 13:28

Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
                 Web Page for STN Seminar Schedule - N. America
NEWS
         MAY 01
                 New CAS web site launched
NEWS
         80 YAM
                 CA/CAplus Indian patent publication number format defined
NEWS
         MAY 14
                 RDISCLOSURE on STN Easy enhanced with new search and display
NEWS.
         MAY 21
                 BIOSIS reloaded and enhanced with archival data
NEWS
         MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS
         MAY 21
                 CA/CAplus enhanced with additional kind codes for German
                 patents
         MAY 22
NEWS
                 CA/CAplus enhanced with IPC reclassification in Japanese
                 patents
NEWS
         JUN 27
                 CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10
         JUN 29
                 STN Viewer now available
NEWS 11
         JUN 29
                 STN Express, Version 8.2, now available
NEWS 12
         JUL 02
                 LEMBASE coverage updated
NEWS 13
         JUL 02
                 LMEDLINE coverage updated
NEWS 14
         JUL 02
                 SCISEARCH enhanced with complete author names
NEWS 15
         JUL 02
                 CHEMCATS accession numbers revised
NEWS 16 JUL 02
                 CA/CAplus enhanced with utility model patents from China
NEWS 17
         JUL 16
                 CAplus enhanced with French and German abstracts
         JUL 18
NEWS 18
                 CA/CAplus patent coverage enhanced
NEWS 19
         JUL 26
                 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 20
         JUL 30
                 USGENE now available on STN
NEWS 21
         AUG 06
                 CAS REGISTRY enhanced with new experimental property tags
NEWS 22
         AUG 06
                 BEILSTEIN updated with new compounds
NEWS 23
        AUG 06
                 FSTA enhanced with new thesaurus edition
NEWS EXPRESS
              29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
NEWS IPC8
              For general information regarding STN implementation of IPC 8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 13:29:46 ON 09 AUG 2007

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'CASREACT' ENTERED AT 13:29:57 ON 09 AUG 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT: 1840 - 5 Aug 2007 VOL 147 ISS 7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Uploading C:\Program Files\Stnexp\Queries\10530465b.str

chain nodes : 17 18 19 20 21 29 31, 32 33 34 35 36 30 37 ring nodes : 10 11 12 13 15 14 16 22 23 chain bonds : 2-31 3-30 4-29 7-17 8-18 10-11 12-32 13-22 14-33 15-34 16-35 18-19 18-20 19-21 23-39 25-38 26-37 27-36 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14 14-15 15-16 22-23 22-27 23-24 24-25 25-26 26-27

exact/norm bonds :

5-7 6-10 7-8 7-17 8-9 9-10 10-11 13-22 18-19 18-20

exact bonds :

2-31 3-30 4-29 8-18 12-32 14-33 15-34 16-35 19-21 23-39 25-38 26-37

27-36

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 22-23 22-27 23-24 24-25 25-26 26-27

isolated ring systems : containing 1 : 11 : 22 :

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS

20:CLASS 21:CLASS 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 29:CLASS

31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 30:CLASS

38:CLASS 39:CLASS

fragments assigned product role:

containing 1

STRUCTURE UPLOADED L1

=> d 11

L1 HAS NO ANSWERS

1.1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

FULL SEARCH INITIATED 13:30:21 FILE 'CASREACT'

SCREENING COMPLETE -160 REACTIONS TO VERIFY FROM 3 DOCUMENTS

100.0% DONE 160 VERIFIED 22 HIT RXNS 1 DOCS

SEARCH TIME: 00.00.01

L21 SEA SSS FUL L1 (22 REACTIONS)

=> d ibib abs fhit tot

ANSWER 1 OF 1 CASREACT COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 141:7041 CASREACT

One-pot preparation of naphthyridine derivatives, TITLE:

useful as inhibitors of phosphodiesterase-4

INVENTOR(S): Albaneze-Walker, Jennifer; Ceglia, Scott; Murry, Jerry

Anthony; Soheili, Arash

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 57 pp., which

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	. APPLICATION NO.	DATE
US 2004102472	A1	20040527	US 2003-690118	20031021
US 6909002	B2	20050621		

PRIORITY APPLN. INFO.:

US 2002-428315P 20021122 US 2003-472598P 20030522

OTHER SOURCE(S):

MARPAT 141:7041

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The invention relates to one-pot preparation of naphthyridine derivs. of formula I [wherein: OR1 is a suitable leaving group; R2 is C1-8alkyl, (un)substituted (hetero)aryl], useful as inhibitors of phosphodiesterase-4 (no biol. data). For instance, naphthyridine derivative II was prepared via heterocyclization of Et 2-chloronicotinoylacetate, 3-bromoaniline, and acetic anhydride, hydrolysis of the obtained ester III (R3 = Br), amidation by isopropylamine, and subsequent phenylacetylation by 3-acetylphenylboronic acid (example 1, no yield data). Naphthyridine derivative IV was prepared using the prepared intermediate III [R3 = -B(OH)2]

(p. 49-53).

RX(12) OF 305 ...AL + B ===> AM

В

AM

RX(12) RCT AL 131534-65-1, B 477251-79-9

RGT D 497-19-8 Na2CO3

PRO AM 477251-87-9

CAT 72287-26-4 Palladium, [1,1'-bis(diphenylphosphino-

κP) ferrocene]dichloro-, (SP-4-2)-

SOL 7732-18-5 Water, 64-17-5 EtOH

CON 1 hour, reflux

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 118.92 119.13

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

CA SUBSCRIBER PRICE ENTRY SESSION
-0.73 -0.73

STN INTERNATIONAL LOGOFF AT 13:31:09 ON 09 AUG 2007

Welcome to STN International! Enter x:x

LOGINID: SSPTANXR1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS
                 Web Page for STN Seminar Schedule - N. America
NEWS
        MAY 01
                 New CAS web site launched
NEWS
      3 · MAY 08
                 CA/CAplus Indian patent publication number format defined
         MAY 14
NEWS
                 RDISCLOSURE on STN Easy enhanced with new search and display
NEWS
         MAY 21
                 BIOSIS reloaded and enhanced with archival data
NEWS
      6
         MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS
         MAY 21
                 CA/CAplus enhanced with additional kind codes for German
                 patents
NEWS
         MAY 22
                 CA/CAplus enhanced with IPC reclassification in Japanese
                 patents
NEWS
         JUN 27
                 CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 10
         JUN 29
                 STN Viewer now available
NEWS 11
         JUN 29
                 STN Express, Version 8.2, now available
NEWS 12
         JUL 02
                 LEMBASE coverage updated
NEWS 13
         JUL 02
                 LMEDLINE coverage updated
         JUL 02
NEWS 14
                 SCISEARCH enhanced with complete author names
         JUL 02
NEWS 15
                 CHEMCATS accession numbers revised
                 CA/CAplus enhanced with utility model patents from China
NEWS 16
         JUL 02
NEWS 17
         JUL 16
                 CAplus enhanced with French and German abstracts
NEWS 18
         JUL 18
                 CA/CAplus patent coverage enhanced
NEWS 19
                 USPATFULL/USPAT2 enhanced with IPC reclassification
         JUL 26
NEWS 20
         JUL 30
                 USGENE now available on STN
                 CAS REGISTRY enhanced with new experimental property tags
NEWS 21
         AUG 06
NEWS 22
         AUG 06
                 BEILSTEIN updated with new compounds
NEWS 23
         AUG 06
                 FSTA enhanced with new thesaurus edition
NEWS EXPRESS
              29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
              Welcome Banner and News Items
NEWS LOGIN
NEWS IPC8
              For general information regarding STN implementation of IPC 8
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 13:32:40 ON 09 AUG 2007

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 13:33:00 ON 09 AUG 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 AUG 2007 HIGHEST RN 944313-22-8 DICTIONARY FILE UPDATES: 8 AUG 2007 HIGHEST RN 944313-22-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10530465a.str

chain nodes : 17 18 19 20 21 29 30 31 32 33 34 35 36 37 38 39

ring nodes : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 22 23 24 25 26 27 chain bonds : 2-31 3-30 4-29 7-17 8-18 10-11 12-32 13-22 14-33 15-34 16-35 18-19 18-20 19-21 23-39 25-38 26-37 27-36 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14 14-15 15-16 22-23 22-27 23-24 24-25 25-26 26-27 exact/norm bonds : 5-7 6-10 7-8 7-17 8-9 9-10 10-11 18-19 18-20 exact bonds : 2-31 3-30 4-29 8-18 12-32 13-22 14-33 15-34 16-35 19-21 23-39 25-38 26-37 27-36 normalized bonds : isolated ring systems : containing 1 : 11 : 22 :

Match level:

3 ... > 1

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STF

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT * Structure attributes must be viewed using STN Express query preparation.

=> s 11 full FULL SEARCH INITIATED 13:33:20 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 24 TO ITERATE

100.0% PROCESSED 24 ITERATIONS 0 ANSWERS SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

=> log y
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 172.10 172.31

STN INTERNATIONAL LOGOFF AT 13:33:26 ON 09 AUG 2007